AC Power Systems for Business Critical Continuity

Load Bus Sync™ Extender/Adapter for Dual Bus UPS

Installation Manual 120V-277VAC, 45-65Hz







TABLE OF CONTENTS

1.0	GENERAL	.1
2.0	INSTALLATION	2
2.1	Liebert NX UPS to Liebert NX UPS	2
2.2	Liebert NX UPS to Non-Liebert NX UPS	3

FIGURES

Figure 1	LBS Adapter dimensions	1
Figure 2	Horizontal installation	1
Figure 3	Vertical installation	1
Figure 4	Connecting a Liebert NX to a Liebert NX	2
Figure 5	Connecting a Liebert NX to a non-NX UPS.	3

TABLES

Table 1	Human interface—indicators and switches	3
Table 2	Electrical rating	3
Table 3	Part number description.	3

ii

1.0 GENERAL

Liebert's Load Bus Sync (LBS) Extender/Adapter for Dual Bus UPS is designed to extend the LBS function, up to 150m (492 ft.) between Liebert NX series uninterruptible power system (UPS) modules of a dual bus system (DBS). The adapter also enables a Liebert NX UPS to synchronize with other UPS models.

Figure 1 LBS Adapter dimensions

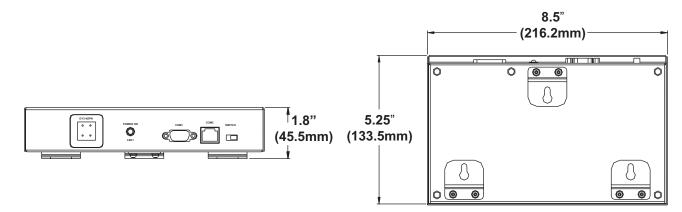
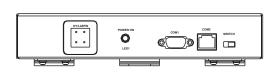


Figure 2 Horizontal installation



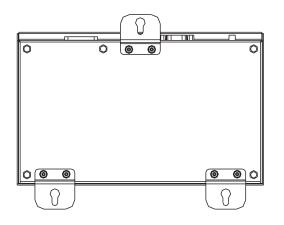
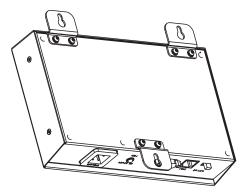
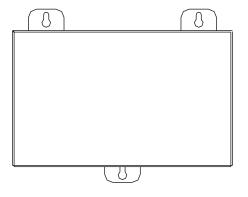


Figure 3 Vertical installation





2.0 INSTALLATION

2.1 Liebert NX UPS to Liebert NX UPS

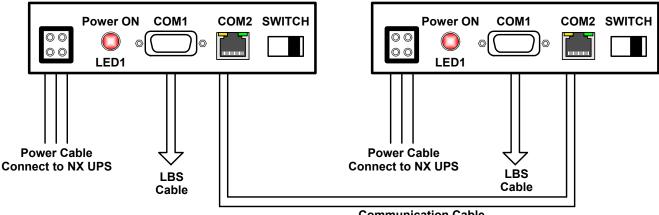


WARNING

Installation by qualified electrical personnel only—hazardous voltage may be present at the UPS output connectors.

- 1. Connect the power cables of the adapter to the Phase A, Neutral and Ground output of each UPS.
- 2. Connect the LBS cable to COM1 of each LBS Signal Adapter.
- 3. Connect the other end of each LBS cable to X4 on the parallel board (UHW241M3) in the NX UPS.
- 4. Connect the communication cable (up to 492 ft. [150m]) to the COM2 interface of each LBS Signal Adapter.
- 5. The switch of both LBS signal adapters should be in the **right** position (see **Figure 4**).





Communication Cable up to 492 ft. (150m)

2.2 Liebert NX UPS to Non-Liebert NX UPS

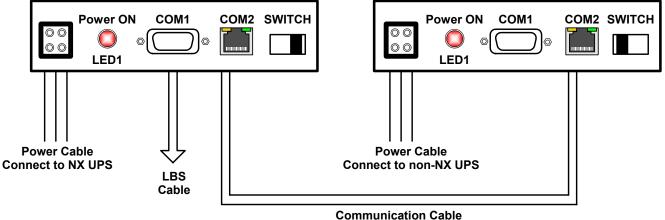


WARNING

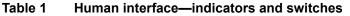
Installation by qualified electrical personnel only—hazardous voltage may be present at the UPS output connectors.

- 1. Connect the power cables of the adapter to the Phase A, Neutral and Ground Output of each UPS.
- 2. Connect the LBS cable to COM1 of the LBS Signal Adapter connected to the Liebert NX.
- 3. Connect the other end of the LBS cable to X4 on the parallel board (UHW241M3) in the NX UPS.
- 4. Connect the communication cable (up to 492 ft. [150m]) to the COM2 interface of each LBS Signal Adapter.
- 5. The switches of LBS signal adapters connected to the Liebert NX should be in the **right** position and the switches of LBS signal adapters connected to the non-NX UPS should be in the **left** position (see **Figure 5**).

Figure 5 Connecting a Liebert NX to a non-NX UPS



Communication Cable up to 492 ft. (150m)



ltem	Description
Power port	Connect to Phase A, Neutral and Ground of output of UPS.
LED1 (red)	Power LED. It illuminates when the power is on, turns off when the power fails.
COM1	LBS Signal interface. Connect to NX series UPS unit.
COM2	RS485 interface. Connect to other Signal Adapter. Green LED: Communication Power is OK. Yellow LED: Adapter is connected to Non NX series UPS.
SWITCH	Switch to left: Connect to Non-NX series UPS unit. Switch to right: Connect to NX series UPS unit.

Table 2Electrical rating

Description	Rating
Voltage	120V-277VAC
Frequency	45-65HZ
Current	0.2A Max

Table 3Part number description

Description	Part Number
150 Meter Kit	NX150MLBSKIT
50 Meter Kit	NX050MLBSKIT

The Company Behind the Products

With over a million installations around the globe, Liebert is the world leader in computer protection systems. Since its founding in 1965, Liebert has developed a complete range of support and protection systems for sensitive electronics:

- Environmental systems—close-control air conditioning from 1 to 60 tons
- Power conditioning and UPS with power ranges from 300 VA to more than 1000 kVA
- Integrated systems that provide both environmental and power protection in a single, flexible package
- Monitoring and control—from systems of any size or location, on-site or remote
- Service and support through more than 100 service centers around the world and a 24/7 Customer Response Center

While every precaution has been taken to ensure the accuracy and completeness of this literature, Liebert Corporation assumes no responsibility and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

© 2006 Liebert Corporation

All rights reserved throughout the world. Specifications subject to change without notice.

 E Liebert and the Liebert logo are registered trademarks of Liebert Corporation. All names referred to are trademarks or registered trademarks of their respective owners.

SL-25247 (2/06) Rev. 0

Emerson Network Power.

The global leader in enabling Business-Critical Continuity.

AC Power Systems Embedded Power

DC Power Systems

Connectivity

Power Protection

Integrated Cabinet Solutions

Technical Support/Service

Web Site www.liebert.com

Monitoring 800-222-5877 monitoring@liebert.com Outside the US: 614-841-6755

Single-Phase UPS 800-222-5877 upstech@liebert.com Outside the US: 614-841-6755

> Three-Phase UPS 800-543-2378 powertech@liebert.com

Environmental Systems 800-543-2778

Outside the United States 614-888-0246

Locations

United States 1050 Dearborn Drive P.O. Box 29186 Columbus, OH 43229

Italy

Via Leonardo Da Vinci 8 Zona Industriale Tognana 35028 Piove Di Sacco (PD) +39 049 9719 111 Fax: +39 049 5841 257

Asia

7/F, Dah Sing Financial Centre 108 Gloucester Road, Wanchai Hong Kong 852 25722201 Fax: 852 28029250

EmersonNetworkPower.com

Outside Plant Precision Cooling Site Monitoring and Services

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2005 Emerson Electric Co

r Protection rated Cabinet Solu